Response Dated February 26, 2007

Reply to Office Action of November 24, 2006

Docket No.: C4-1184 Examiner: Lieu, Julie Bichngoc

TC/A.U. 2612

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the

application.

Listing of Claims:

1. (Previously Presented) A security tag, comprising a tag housing; a tack body; and a

linear clamp disposed within said tag housing, the linear clamp including a spring arm to

bias the linear clamp against one or more abutments, the linear clamp having a slot to

retain said tack body, and to move in a substantially linear direction in response to a force

to release said tack body from said slot.

2. (Previously Presented) The security tag of claim 1, wherein said linear clamp further

comprises: a clamp body; said spring arm attached to a first edge of said clamp body; and

a tack retaining body to retain said tack body.

3. (Original) The security tag of claim 2, wherein said tack retaining body comprises a

first jaw and a second jaw, with each jaw terminating in spaced facing edges, said spaced

facing edges forming said slot and a jaw open area in said clamp body.

4. (Original) The security tag of claim 3, wherein said jaws extend from a common

second edge of said clamp body.

Response Dated February 26, 2007

Reply to Office Action of November 24, 2006

Examiner: Lieu, Julie Bichngoc

TC/A.U. 2612

Docket No.: C4-1184

5. (Original) The security tag of claim 3, wherein said jaws are integrally formed with

said clamp body.

6. (Original) The security tag of claim 3, wherein said tack body comprises at least one

first portion and at least one second portion, said first and second portions having first

and second diameters, respectively, with said second diameter smaller than said first

diameter.

7. (Original) The security tag of claim 6, wherein said slot has a width approximate to

said second diameter, wherein said jaws move from a first position to a second position to

accommodate said first portions, and from second position to said first position to retain

said second portions.

8. (Original) The security tag of claim 3, wherein a side of said clamp body forms a first

plane, and a side of said tack retaining body forms a second plane substantially parallel to

said first plane.

9. (Original) The security tag of claim 3, wherein a first portion of said spaced facing

edges are substantially parallel to form said slot, with a first end of said slot forming a

curve approximating a curve for said tack body, and said second end of said slot forming

a release section opening into said jaw open area.

Response Dated February 26, 2007

Reply to Office Action of November 24, 2006

Docket No.: C4-1184 Examiner: Lieu, Julie Bichngoc

TC/A.U. 2612

10. (Original) The security tag of claim 9, wherein said tag body includes a channel for a

detachment probe, said channel configured to accommodate movement of said

detachment probe to contact said first edge of said linear clamp.

11. (Original) The security tag of claim 10, wherein said detachment probe provides

force against said second edge to move said linear clamp from a first position to a second

position in said linear direction.

12. (Original) The security tag of claim 11, wherein said linear clamp moves from said

second position to said first position when said force is terminated.

13. (Original) The security tag of claim 3, wherein a second portion of said spaced facing

edges are straight to form said jaw open area, with a first distance between a first end of

said jaw open area being less than a second distance between a second end of said jaw

open area.

14. (Original) The security tag of claim 1, wherein said tag housing comprises a top half

and a bottom half, with said bottom half having a guide to assist movement of said linear

clamp in said linear direction.

15. (Previously Presented) The security tag of claim 14, wherein said bottom half

includes the abutment, said abutment being disposed approximately in line with said

Response Dated February 26, 2007

Reply to Office Action of November 24, 2006

Docket No.: C4-1184 Examiner: Lieu, Julie Bichngoc

TC/A.U. 2612

force.

16. (Original) The security tag of claim 2, wherein said spring arm comprises: a spring

arm body that extends along said first edge of said clamp body; and a curved joint joining

said spring arm body to one end of said clamp body.

17. (Original) The security tag of claim 2, wherein said spring arm moves from a first

position to a second position in response to said force, and moves from said second

position to said first position when said force terminates.

18. (Original) The security tag of claim 3, further comprising a bridge across said jaw

open area.

19. (Original) The security tag of claim 18, wherein said tag body includes a channel for

a detachment probe, said channel configured to accommodate movement of said

detachment probe to contact said bridge.

20. (Original) The security tag of claim 19, wherein said detachment probe provides

force against said bridge to move said linear clamp from a first position to a second

position in said linear direction.

21. (Original) The security tag of claim 20, wherein said linear clamp moves from said

second position to said first position when said force is terminated.

Response Dated February 26, 2007

Reply to Office Action of November 24, 2006

Examiner: Lieu, Julie Bichngoc

TC/A.U. 2612

Docket No.: C4-1184

22. (Original) The security tag of claim 3, wherein a first portion of said spaced facing

edges are substantially straight to form said slot, with a first end of said slot having a first

width and forming a curve approximating a curve for said tack body, and a second end of

said slot forming a release section opening into said jaw open area, with said release

section having a second width smaller than said first width.

23. (Original) The security tag of claim 22, wherein said tag housing comprises a top

half and a bottom half, with said bottom half having a guide to assist movement of said

linear clamp in said linear direction.

24. (Previously Presented) The security tag of claim 23, wherein said bottom half

includes the abutment, the abutment being disposed to generate a clockwise moment

approximately equal and opposite to a counterclockwise moment caused by said slot.

25. (Previously Presented) A linear clamp for a security tag, comprising: a clamp body; a

spring arm attached to a first edge of said clamp body to bias the linear clamp against one

or more abutments; and a tack retaining body having a slot to retain a tack body, and to

release said tack body from said slot in response to a force applied in a substantially

linear direction.

26. (Original) The linear clamp of claim 25, wherein said tack retaining body comprises

Response Dated February 26, 2007 Reply to Office Action of November 24, 2006

a first jaw and a second jaw, with each jaw terminating in spaced facing edges, said

Docket No.: C4-1184

TC/A.U. 2612

Examiner: Lieu, Julie Bichngoc

spaced facing edges forming said slot and a jaw open area in said clamp body.

27. (Original) The linear clamp of claim 26, wherein said jaws extend from a common

second edge of said clamp body.

28. (Original) The linear clamp of claim 26, wherein said jaws are integrally formed with

said clamp body.

29. (Original) The linear clamp of claim 26, wherein a side of said clamp body forms a

first plane, and a side of said tack retaining body forms a second plane substantially

parallel to said first plane.

30. (Original) The linear clamp of claim 26, wherein a first portion of said spaced facing

edges are substantially parallel to form said slot, with a first end of said slot forming a

curve approximating a curve for said tack body, and said second end of said slot forming

a release section opening into said jaw open area.

31. (Original) The linear clamp of claim 26, wherein said second edge of said tack

retaining body receives force to move said linear clamp from a first position to a second

position in said linear direction.

32. (Original) The linear clamp of claim 31, wherein said tack body moves into said jaw

Response Dated February 26, 2007

Reply to Office Action of November 24, 2006

Examiner: Lieu, Julie Bichngoc

Docket No.: C4-1184

TC/A.U. 2612

open area when said linear clamp is in said second position, thereby releasing said tack

body from said tack retaining body.

33. (Original) The linear clamp of claim 32, wherein said linear clamp moves from said

second position to said first position when said force is terminated.

34. (Original) The linear clamp of claim 26, wherein a second portion of said spaced

facing edges are straight to form said jaw open area, with a first distance between a first

end of said jaw open area being less than a second distance between a second end of said

iaw open area.

35. (Original) The linear clamp of claim 31, wherein said spring arm comprises: a spring

arm body that extends along said first edge of said clamp body; and a curved joint joining

said spring arm body to one end of said clamp body.

36. (Original) The linear clamp of claim 35, wherein said spring arm moves from a first

position to a second position in response to said force, and moves from said second

position to said first position when said force terminates.

37. (Original) The linear clamp of claim 36, wherein said spring arm is biased

approximately in line with said force.

Response Dated February 26, 2007

Reply to Office Action of November 24, 2006

Docket No.: C4-1184 Examiner: Lieu, Julie Bichngoc

TC/A.U. 2612

38. (Original) The linear clamp of claim 26, further comprising a bridge across said jaw

open area.

39. (Original) The linear clamp of claim 38, wherein said bridge receives force to move

said linear clamp from a first position to a second position in said linear direction.

40. (Original) The linear clamp of claim 39, wherein said tack body moves into said jaw

open area when said linear clamp is in said second position, thereby releasing said tack

body from said tack retaining body.

41. (Original) The linear clamp of claim 40, wherein said linear clamp moves from said

second position to said first position when said force is terminated.

42. (Original) The linear clamp of claim 26, wherein a first portion of said spaced facing

edges are substantially straight to form said slot, with a first end of said slot having a first

width and forming a curve approximating a curve for said tack body, and a second end of

said slot forming a release section opening into said jaw open area, with said release

section having a second width smaller than said first width.

43. (Original) The linear clamp of claim 42, wherein a second edge of said tack retaining

body receives force to move said linear clamp from a first position to a second position in

said linear direction.

Response Dated February 26, 2007

Reply to Office Action of November 24, 2006

Docket No.: C4-1184 Examiner: Lieu, Julie Bichngoc

TC/A.U. 2612

44. (Original) The linear clamp of claim 43, wherein said tack body moves into said jaw

open area when said linear clamp is in said second position, thereby releasing said tack

body from said tack retaining body.

45. (Original) The linear clamp of claim 44, wherein said linear clamp moves from said

second position to said first position when said force is terminated.

46. (Original) The linear clamp of claim 42, wherein said spring arm comprises: a spring

arm body that extends along said first edge of said clamp body; and a curved joint joining

said spring arm body to one end of said clamp body.

47. (Original) The linear clamp of claim 46, wherein said spring arm moves from a first

position to a second position in response to said force, and moves from said second

position to said first position when said force terminates.

48. (Original) The linear clamp of claim 47, wherein said spring arm is biased to

generate a clockwise moment approximately equal and opposite to a counterclockwise

moment caused by said slot.

49. (Withdrawn) A security system, comprising: a security tag having a linear clamp

with a slot to retain a tack body; a monitoring system to detect said security tag; and an

alert system to communicate an alert if said monitoring system detects said security tag.

Appl. No. 10/612,750 Docket No.: C4-1184
Response Dated February 26, 2007 Examiner: Lieu, Julie Bichngoc

Reply to Office Action of November 24, 2006 TC/A.U. 2612

50. (Withdrawn) The security system of claim 49, further comprising a detachment

device to detach said security tag from an item.

51. (Withdrawn) The security system of claim 50, wherein said detachment device

includes a detachment probe.

52. (Withdrawn) The security system of claim 51, wherein said security tag further

comprises a tag housing and a tack body, with said linear clamp disposed within said tag

housing to retain said tack body, and said linear clamp to move in a substantially linear

direction in response to force provided by said detachment probe to release said tack

body from said slot.